

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

BRANDYWINE COMMUNICATIONS  
TECHNOLOGIES, LLC,

Plaintiff,

v.

AT&T CORP., et al.,

Defendants.

No. C 12-2494 CW

ORDER CONSTRUING  
CLAIMS; GRANTING  
MOTION FOR LEAVE  
TO AMEND  
INFRINGEMENT  
CONTENTIONS;  
DENYING MOTION TO  
STRIKE INFRINGEMENT  
CONTENTIONS  
(Docket Nos. 68,  
128, 149)

Plaintiff Brandywine Communications Technologies, LLC brought this action against Defendants AT&T Corporation and SBC Internet Services, Inc. for patent infringement. The parties dispute the meaning of sixteen claim terms in five of Brandywine's patents: U.S. Patent Nos. 5,251,328 ('328 patent), 5,812,537 ('537 patent), 6,970,501 ('501 patent), 7,894,472 ('472 patent), and 5,828,657 ('657 patent).<sup>1</sup> After considering the parties' submissions and oral argument, the Court construes the disputed terms as set forth below. In addition, the Court grants Brandywine's motion for leave to amend its infringement contentions and denies Defendants' motion to strike.

BACKGROUND

This case is one of over forty lawsuits that Brandywine has filed around the country over the past two years alleging "infringement of six patents that generally relate to networking protocols, techniques, and systems for use in the provision of

<sup>1</sup> The parties represent that they do not dispute the meaning of any claims in the sixth patent in suit, U.S. Patent No. 5,206,854.

1 Internet connectivity via digital subscriber line (DSL)  
2 technology." In re Brandywine Commc'ns Techs., LLC, Patent  
3 Litig., 959 F. Supp. 2d 1377, 1378 (J.P.M.L. 2013). Most of these  
4 actions have been voluntarily dismissed pursuant to settlement  
5 agreements. Id. As a result, this is only the second of these  
6 cases to reach the claim construction stage. The first claim  
7 construction order regarding these patents was issued by a court  
8 in the Middle District of Florida in April 2013. Brandywine  
9 Commc'ns Technologies, LLC v. CenturyTel Broadband Servs., LLC,  
10 Civil Case No. 12-0286, Docket No. 96 (M.D. Fla. April 17, 2013)  
11 (CenturyTel).<sup>2</sup>

12 The parties in this action originally filed their motions for  
13 claim construction in April and May 2013. While those motions  
14 were pending, however, Brandywine filed a motion for  
15 centralization of its various patent infringement actions with the  
16 Judicial Panel on Multidistrict Litigation. In light of that  
17 motion, this Court vacated the scheduled claim construction  
18 hearing and stayed the present action pending a decision by the  
19 Panel on whether to centralize these cases. In August 2013, the  
20 Panel denied Brandywine's motion. It noted that Brandywine's  
21 various actions were "being litigated in a manner that is likely  
22 to lead to their resolution, whether through settlement or other  
23 means, within a relatively short period of time" and thus  
24 concluded that "centralization of this litigation might hinder the  
25 orderly and efficient resolution of these cases." In re

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26  
27 <sup>2</sup> Brandywine has submitted a copy of the CenturyTel court's  
28 unpublished claim construction order as Exhibit F to the Declaration of  
Lei Sun. See Docket No. 68-7.

1 Brandywine Commc'ns Techs., LLC, Patent Litig., 959 F. Supp. 2d at  
2 1378. This Court lifted the stay and heard the parties' motions  
3 for claim construction in September 2013.

4 Four months later, in January 2014, Brandywine served  
5 Defendants with supplemental infringement contentions. Defendants  
6 promptly moved to strike those supplemental infringement  
7 contentions on the grounds that Brandywine had failed to obtain  
8 leave of the Court, as required by this Court's Local Rules.  
9 Brandywine moved for leave to amend its infringement contentions  
10 shortly thereafter.

#### 11 DISCUSSION

##### 12 I. Claim Construction

##### 13 A. Legal Standard

14 The construction of a patent is a matter of law for the  
15 Court. Markman v. Westview Instruments, Inc., 517 U.S. 370, 372  
16 (1996). "It is a 'bedrock principle' of patent law that 'the  
17 claims of a patent define the invention to which the patentee is  
18 entitled the right to exclude.'" Phillips v. AWH Corp., 415 F.3d  
19 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Innova/Pure Water,  
20 Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115  
21 (Fed. Cir. 2004)). Accordingly, in construing disputed terms, the  
22 Court first looks to the words of the claims. Vitronics Corp. v.  
23 Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).  
24 Generally, the court ascribes the words of a claim their ordinary  
25 and customary meaning. Id. The Federal Circuit instructs that  
26 "the ordinary and customary meaning of a claim term is the meaning  
27 that the term would have to a person of ordinary skill in the art  
28 in question at the time of the invention, i.e., as of the

1 effective filing date of the patent application." Phillips, 415  
2 F.3d at 1313. Other claims of the patent in question can also  
3 assist in determining the meaning of a claim term. Id. at 1314.  
4 "Because claim terms are normally used consistently throughout the  
5 patent, the usage of a term in one claim can often illuminate the  
6 meaning of the same term in other claims." Id.

7 The Federal Circuit also instructs that claims "must be read  
8 in view of the specification, of which they are a part." Id. at  
9 1315 (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967,  
10 979 (Fed. Cir. 1995) (en banc)). The specification must contain a  
11 description of the invention that is clear and complete enough to  
12 enable those of ordinary skill in the art to make and use it, and  
13 thus the specification is "always highly relevant" to the Court's  
14 claim construction analysis. Vitronics, 90 F.3d at 1582.

15 "Usually, [the specification] is dispositive; it is the single  
16 best guide to the meaning of a disputed term." Id. In some  
17 cases, the specification may reveal that the patentee has given a  
18 special definition to a claim term that differs from its ordinary  
19 meaning; in such cases, "the inventor's lexicography controls."  
20 Phillips, 415 F.3d at 1316. The specification also may reveal the  
21 patentee's intentional disclaimer or disavowal of claim scope.

22 "In that instance as well, the inventor has dictated the correct  
23 claim scope, and the inventor's intention, as expressed in the  
24 specification, is regarded as dispositive." Id. However, claims  
25 are not limited to the preferred embodiment described in the  
26 specification. See SRI Int'l v. Matsushita Elec. Corp. of Am.,  
27 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc; plurality opinion).

1 While emphasizing the importance of intrinsic evidence in  
2 claim construction, the Federal Circuit has authorized courts to  
3 rely on extrinsic evidence, which consists of "all evidence  
4 external to the patent and prosecution history, including expert  
5 and inventor testimony, dictionaries, and learned treatises."  
6 Phillips, 415 F.3d at 1317 (quoting Markman, 52 F.3d at 980).  
7 While extrinsic evidence may be useful to the Court, it is less  
8 significant than intrinsic evidence in determining the legally  
9 operative meaning of claim language. Phillips, 415 F.3d at 1317-  
10 18; see also C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858,  
11 862 (Fed. Cir. 2004). Furthermore, extrinsic evidence is unlikely  
12 to lead to a reliable interpretation of claim language unless  
13 considered in the context of the intrinsic evidence. Phillips,  
14 415 F.3d at 1319.

15 B. '328 Patent

16 When a signal is transmitted through a communications  
17 channel, its waveform or amplitude may be altered during the  
18 transmission process. Undesirable alterations are typically known  
19 as "distortions." See generally Microsoft Computer Dictionary 146  
20 (4th ed. 1999) (defining a "distortion" as the "undesirable change  
21 in the waveform of a signal"). The '328 patent discloses "a  
22 technique for compensating for distortion introduced in a portion  
23 of a communications channel." '328 patent col. 1:7-:10.

24 The parties dispute four of the '328 patent's claim terms.  
25 Claim 2 illustrates the patent's usage of two of these terms, both  
26 of which are highlighted in bold below:

27 A method for use in a transceiver of a  
28 communications system wherein a  
communications channel through which a

1 signal is transmitted introduces amplitude  
2 distortion, said method comprising the  
3 steps of  
4 **determining** less than all of the amplitude  
5 distortion introduced within said  
6 communications channel in response to a  
7 signal received from said communications  
8 channel using apparatus [sic] designed to  
9 determine less than all of the amplitude  
10 distortion introduced within said  
11 communications channel; and  
12 **predistorting a transmitted signal from said**  
13 **transceiver** in response to said determined  
14 amplitude distortion.

15 '328 patent col. 6:6-:18.

16 Claim 15 illustrates how the other two disputed terms are  
17 used:

18 A method for use in a communications system  
19 wherein a signal is transmitted from a  
20 transmitter through a communications  
21 channel to a receiver, said **communications**  
22 **channel including a plurality of serially**  
23 **connected channel sections which introduce**  
24 **amplitude distortion into a transmitted**  
25 **signal** including the **section** adjacent said  
26 receiver, said method comprising the steps  
27 of  
28 receiving a training sequence including at  
least one a priori known signal and  
determining the amplitude distortion  
introduced only in the communications  
channel **section** adjacent said receiver in  
response to said received training  
sequence.

'328 patent col. 7:8-:21. The disputed terms appear in claims 2,  
3, 15, and 21 of the patent.

1. "Communications Channel Including a Plurality of Serially Connected Channel Sections Which Introduce Amplitude Distortion into a Transmitted Signal" (Claims 3, 15)<sup>3</sup>

The parties dispute whether every section of the "communications channel" described in this term must introduce distortion into the transmitted signal. Defendants argue that every "section" of the communications channel must introduce distortion because the subject of the verb "introduce" appears to be "sections" rather than "plurality." Brandywine, in contrast, argues that the term may describe any communications channel in which "at least one" section introduces distortion. The CenturyTel court adopted Defendants' proposed construction. Sun Decl., Ex. F, April 2013 CenturyTel Order, at 14 (holding that "the grammatical construction of the sentence forecloses the possibility that just one channel section can introduce amplitude distortion").

The Court finds that Defendants' proposed construction is overly restrictive because it effectively construes the word "plurality" to mean "all" rather than simply "a large number," which is its ordinary meaning. See Webster's Third New International Dictionary 1745 (Philip Babcock Gove ed. 1993). Even assuming that "sections" is the intended subject of "introduce," as Defendants contend,<sup>4</sup> the number of "sections" that introduce distortion is still constrained by the word "plurality."

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<sup>3</sup> The term, "sections," as it is used in this and other claims from the '328 patent, is construed separately below.

<sup>4</sup> While Defendants are correct that "plurality" is a singular noun -- and, as such, cannot correctly be the subject of "introduce" -- native English writers frequently treat collective nouns like "plurality" as though they are plural. See Valerie Krishna, "The Syntax of Error," 1 J. Basic Writing 43, 44 (1975) (observing that collective nouns are a common source of grammatical error).

1 The Court therefore adopts Brandywine's proposed construction  
2 for this claim term, which reads as follows: "communications  
3 channel including a plurality of serially connected channel  
4 sections, at least one of which introduces amplitude distortion  
5 into a transmitted signal."

6 2. "Determining" claims (Claims 2, 15, 21)

7 The '328 patent specification discloses a method for  
8 "determining the distortion introduced within a portion of a  
9 communications channel" and then using that determination "to  
10 predistort the signal transmitted by that transceiver to  
11 compensate for all or a part of the determined amplitude  
12 distortion." '328 patent col. 2:9-:15. Three of the patent's  
13 claims use the term "determining" to describe the first part of  
14 this process, during which the level of amplitude distortion is  
15 initially determined.

16 The parties dispute whether the "determining" steps can be  
17 performed by analyzing a signal that has traveled through only  
18 part of the communications channel, rather than the entire  
19 channel. Defendants contend that the signal must travel through  
20 the entire channel. They note that a preferred embodiment of the  
21 invention described in the specification requires both the  
22 transmission and receipt of "known signals" (sometimes called a  
23 "training sequence") through a given communications channel in  
24 order to determine the level of amplitude distortion introduced by  
25 that communications channel. Id. col. 2:17-:20. Defendants argue  
26 that this description shows that the "determining" steps require  
27 an examination of a "training sequence" that has been transmitted  
28 through the entire communications channel. Two of the disputed



1 claims, however, do not contain this limitation and Defendants  
2 have not identified anything in the prosecution history to suggest  
3 that the "determining" steps should be construed so narrowly.  
4 Moreover, several of the patent's other claims disclose a specific  
5 apparatus that uses a "training sequence" to determine the  
6 amplitude distortion. See id. col. 8:14-:25. This suggests that  
7 the "determining" steps in the three disputed claims -- two of  
8 which do not refer specifically to any "training sequence" -- were  
9 not meant to be construed as narrowly as Defendants suggest.<sup>5</sup>

10 Thus, because Defendants' proposed limitation is based on a  
11 preferred embodiment of the invention, their argument that the  
12 "determining" claims require a known signal to traverse the entire  
13 communications channel must be rejected. See SRI Int'l v.  
14 Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1121 (Fed. Cir.  
15 1985) (en banc; plurality opinion) (recognizing that preferred  
16 embodiments in the specification should not be used to limit claim  
17 language). The CenturyTel court likewise rejected this argument  
18 in its claim construction order. See CenturyTel Order 14-17.

19 The Court therefore adopts the following constructions of the  
20 "determining" terms in claims 2, 15, and 21.<sup>6</sup>

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22 <sup>5</sup> Defendants note that Brandywine misapplied the doctrine of claim  
23 differentiation when it raised this argument in its opening brief  
24 because claim 19 is not dependent on any of the specific claims in  
25 dispute here. Even if the doctrine is inapplicable here, however, the  
26 underlying logic of Brandywine's argument remains correct: the  
inventor's use of a more specific term -- "training sequence" -- in the  
undisputed claims suggests that he deliberately omitted that term from  
the disputed claims.

27 <sup>6</sup> The Court rejects the alternative constructions proposed by  
28 Defendants in their supplemental post-hearing brief because all of their  
alternative constructions use a grammatical structure that is likely to  
cause confusion.

1 Claim 2: "determining less than all of the amplitude  
2 distortion introduced within said communications channel in  
3 response to a signal received from said communications channel" is  
4 construed as "determining less than all of the amplitude  
5 distortion introduced within said communications channel in  
6 response to a signal which was received from said communications  
7 channel and traveled through all or part of that communications  
8 channel."

9 Claim 15: "determining the amplitude distortion introduced  
10 only in the communications channel section adjacent said receiver  
11 in response to said received training sequence" is construed as  
12 "determining the amplitude distortion introduced only in the  
13 communications channel section adjacent said receiver in response  
14 to said received training sequence, which traveled through all or  
15 part of that communications channel."

16 Claim 21: "determining the amplitude distortion introduced  
17 within only one of said communications channel sections in  
18 response to a signal received from said communications channel" is  
19 construed as "determining the amplitude distortion introduced  
20 within only one of said communications channel sections in  
21 response to a signal which was received from said communications  
22 channel and traveled through all or part of that communications  
23 channel."

24 3. "Predistorting a Transmitted Signal from Said  
25 Transceiver" (Claims 2, 21)

26 The parties' disagreement concerning the meaning of the  
27 "predistorting" terms has two parts. First, they dispute whether  
28 the "predistorting" step disclosed in claims 2 and 21 requires

1 that the predistortion be based on the "inverse of the amplitude  
2 distortion." Defs.' Claim Constr. Brief 23. Second, they dispute  
3 whether the "predistorting" steps in these claims must be  
4 performed by the same transceiver that performs the "determining"  
5 steps discussed above.

6 Regarding the first dispute, Defendants argue that the  
7 specification expressly requires that the "predistorting" steps be  
8 based on an "inverse of the amplitude distortion." For support,  
9 they cite language from the specification which states, "In  
10 certain system applications, it is desirable to predistort the  
11 transmitted signal from transceiver 102 based on the exact inverse  
12 of the determined distortion characteristic." '328 patent col.  
13 5:1-:18 (emphasis added). Defendants' reliance on this sentence  
14 is misplaced, however, because the sentence's prefatory clause --  
15 "In certain applications" -- makes clear that it is only  
16 describing a preferred embodiment of the invention. Id. (emphasis  
17 added). The claims themselves do not incorporate Defendants'  
18 proposed limitation into the "predistorting" steps. The  
19 CenturyTel court reached the same conclusion. CenturyTel Order  
20 11-13.

21 Regarding the parties' second dispute, the Court finds that  
22 the "determining" and "predistorting" steps must both be performed  
23 by the same transceiver. The language of claim 2 supports this  
24 construction because it refers only to one transceiver. Claim 2  
25 discloses a "method for use in a transceiver" for "determining  
26 less than all of the amplitude distortion introduced" by a given  
27 communications channel. '328 patent col. 6:6-:11 (emphasis  
28 added). The same claim discloses a method for "predistorting a

1 transmitted signal from said transceiver in response to said  
2 determined amplitude distortion." Id. col. 6:16-:18 (emphasis  
3 added). This suggests that the two steps are performed by a  
4 single transceiver.

5 This interpretation is consistent with the specification's  
6 "Summary of the Invention," which states,

7 the present invention covers the notion of  
8 determining the distortion introduced within a  
9 portion of a communications channel between  
10 two signal transceivers by processing the  
11 received signal at a transceiver and then  
12 using the results of this processing to  
13 predistort the signal transmitted by that  
14 transceiver to compensate for all or a part of  
15 the determined amplitude distortion.

16 Id. col. 2:8-:15 (emphasis added). This language indicates that  
17 the "predistorting" step is performed by the same transceiver that  
18 performs the "determining" step. Although the CenturyTel court  
19 reached a different conclusion, it did not explain its reasoning.

20 The Court therefore adopts the following construction, which  
21 omits Defendants' proposed limitation and makes clear that the  
22 "predistorting" and "determining" steps are performed by the same  
23 transceiver: "adjusting a signal, to be transmitted from the same  
24 transceiver that determined the amplitude distortion, to  
25 compensate for amplitude distortion before the introduction of the  
26 amplitude distortion."

27 4. "Section(s)" (Claims 15, 21)

28 The parties dispute whether the term "section(s)" should be  
construed as "subscriber loops," as Defendants contend, or given  
its plain and ordinary meaning, as Brandywine contends. The  
CenturyTel court did not discuss this term in its claim  
construction order.

1 Because the patent claims clearly distinguish between  
2 "section(s)" and "subscriber loops," Defendants' proposed  
3 construction must be rejected. Claim 6 of the patent refers  
4 specifically to a communications channel that "includes two  
5 subscriber loops and the communications channel section adjacent  
6 said apparatus is a subscriber loop." '328 patent col. 6:44-:46.  
7 If "section" were construed to mean "subscriber loop," as  
8 Defendants have proposed, then this claim language would be  
9 redundant.

10 The Court therefore finds that this term should be construed  
11 according to its plain and ordinary meaning.

12 C. '537 Patent

13 When a signal is transmitted over a communications channel,  
14 an unwanted "echo" of that signal is sometimes transmitted back to  
15 the sender. The '537 patent discloses an "echo canceling method  
16 and apparatus" intended to reduce these unwanted signals. '537  
17 patent col 1:66. The parties agree that the term "echo," as it is  
18 used in this patent and the '657 patent, means "a reflected signal  
19 that is transmitted by one receiver, reflected by something on the  
20 transmission line, and then received by the same transceiver."

21 The parties dispute four of the '537 patent's claim terms.  
22 All four of these terms appear in claim 1 of the patent, which  
23 reads as follows:

24 Data communications equipment apparatus  
25 comprising:  
26 an echo canceler for processing an echo-  
27 corrupted signal to provide an echo-  
28 canceled signal, wherein the echo canceler  
has a set of tap coefficients, each tap  
coefficient having an initial value  
determined during a half-duplex portion of  
a training sequence;

1           circuitry for detecting the presence of a  
2           **residual echo** signal in the echo-canceled  
3           signal during full-duplex transmission that  
4           is subsequent to said half-duplex portion  
5           of the training sequence; and  
6           a processor, coupled to the circuitry, **for**  
7           **adjusting each initial value of each tap**  
8           **coefficient by a fixed amount** when the  
9           detected **residual echo** signal during full  
10          duplex transmission is greater than a  
11          **predetermined amount**.

12          '537 patent col. 7:40-:55. The disputed claim terms also appear  
13          in claims 2, 6, 7, 12, 13, and 19.

14           1.    "Fixed Amount" (Claims 1, 6, 12, 19)

15           Defendants contend that this term should be construed as  
16           "predefined, non-variable amount." Brandywine, in contrast,  
17           contends that it should be given its plain and ordinary meaning.

18           The Court finds that this term should be given its plain and  
19           ordinary meaning because, as the CenturyTel court explained, the  
20           term "does not have a technical meaning that would cause jury  
21           confusion." CenturyTel Order 18; see also Phillips, 415 F.3d at  
22           1314 ("In some cases, the ordinary meaning of claim language as  
23           understood by a person of skill in the art may be readily apparent  
24           even to lay judges, and claim construction in such cases involves  
25           little more than the application of the widely accepted meaning of  
26           commonly understood words.").

27           2.    "Predetermined Amount" (Claims 1, 19)

28           Defendants contend that this term should be construed as  
          "threshold error level determined before training to indicate  
          incorrect training." Brandywine asserts that it should be given  
          its plain and ordinary meaning. The CenturyTel court did not  
          discuss this term in its claim construction order.

1 Because this term does not have a technical meaning that is  
2 likely to cause confusion, the Court finds that this term should  
3 be construed according to its plain and ordinary meaning.

4 Phillips, 415 F.3d at 1314.

5 3. "Residual Echo" (Claims 1, 2, 6, 7, 12, 13)

6 Defendants contend that the term should be construed as  
7 "uncanceled echo resulting from a non-linear condition during  
8 half-duplex training not present during full-duplex training"  
9 while Brandywine contends that it should be construed as "portion  
10 of an echo that remains after filtering."<sup>7</sup> The CenturyTel court  
11 did not discuss this term in its claim construction order.

12 Defendants' proposed construction would improperly limit the  
13 meaning of the disputed term by requiring that the residual echo  
14 result from "a non-linear condition." Defendants have not offered  
15 any compelling reasons to impose such a limitation here.  
16 Furthermore, Defendants' proposed construction would add confusing  
17 and redundant language to the disputed claims by attempting to  
18 describe the residual echo's relationship to the training  
19 sequences. The disputed claims already contain similar language.  
20 See, e.g., '328 patent col. 7:47-:50 (claiming "circuitry for  
21 detecting the presence of a residual echo signal in the echo-  
22 canceled signal during full-duplex transmission that is subsequent  
23 to said half-duplex portion of the training sequence"). Thus,

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24 <sup>7</sup> Brandywine originally proposed that this term be construed  
25 according to its plain and ordinary meaning. At the hearing, however,  
26 the Court noted that many jurors would not be familiar with the plain  
27 and ordinary meaning of "residual echo" and directed the parties to  
28 propose an alternative construction for this term. Brandywine thus  
proposed a new construction in a supplemental brief that it submitted  
jointly with Defendants after the hearing. The Court considers  
Brandywine's alternative proposed construction here.

1 because Defendants' proposed construction is unjustifiably narrow  
2 and likely to confuse the jury, it must be rejected.

3 Brandywine's proposed construction, unlike Defendants', does  
4 not impose any improper limitations on the scope of the disputed  
5 term. It still has the potential to cause confusion, however,  
6 because it uses the word "filtering," which does not appear in any  
7 of the patent's other claims. To address this problem, the Court  
8 adopts a modified version of Brandywine's proposal and construes  
9 the disputed term as follows: "portion of an echo that remains  
10 after an echo-cancelation process."

11 4. "Adjusting the Initial Value of (Each One of the  
12 Set of) Tap Coefficient (of the Echo Canceler) by a  
Fixed Amount" (Claims 1, 12, 15, 19, 22)

13 Defendants contend that the "adjusting" process described in  
14 these claims is "distinct from the continued adaptation of the  
15 echo canceler." Defs.' Claim Constr. Resp. 31. Brandywine argues  
16 that this construction improperly limits the scope of the disputed  
17 term. The CenturyTel court agreed with Brandywine and found that  
18 this term should be construed according to its plain and ordinary  
19 meaning. CenturyTel Order 19 (citing Finjan, Inc. v. Secure  
20 Computing Corp., 626 F.3d 1197, 1207 (Fed. Cir. 2010)).

21 This Court rejects Defendants' proposed construction for the  
22 same reasons as the CenturyTel court. The Federal Circuit has  
23 cautioned against narrowing the scope of a claim when the  
24 "additional negative limitation finds no anchor in the explicit  
25 claim language." Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d  
26 1314, 1322 (Fed. Cir. 2003). A court, therefore, should not add a  
27 negative limitation to a claim unless it finds an "express  
28 disclaimer or independent lexicography in the written description



1 [of the invention] that would justify adding that negative  
2 limitation." Id. at 1323. Defendants have not identified any  
3 such justification here. Instead, they point to a sentence in the  
4 specification stating that the process of adaptive adjustment is  
5 costly and difficult to implement. See '537 patent col. 3:16-:20  
6 ("Full-duplex training of the echo canceler, while theoretically  
7 possible, is not practical from a price/performance viewpoint in  
8 the design of data communications equipment."). This broad  
9 language does not rise to the level of an "express disclaimer" and  
10 therefore does not support the limitation Defendants seek to  
11 impose. Indeed, this limitation would conflict with other  
12 language in the patent specification suggesting that the invention  
13 is capable of adaptive adjustment. See id. col. 7:33-:36 ("[T]he  
14 inventive concept is also applicable to an echo canceler that  
15 adapts in the data phase, since, typically, the echo canceler  
16 adapts too slowly to the changes in the echo signal."). Thus,  
17 Defendants' proposed construction must be rejected.

18 The Court finds that this term should be construed according  
19 to its plain and ordinary meaning. To facilitate the jury's  
20 understanding of the plain and ordinary meaning of this term,  
21 however, the Court adopts the parties' agreed upon definition of  
22 "tap coefficients": "settings that define the operating  
23 characteristics of the echo canceler."

24 D. '657 Patent

25 Like the '537 patent, the '657 patent also relates to echo  
26 cancellation technology. The parties dispute only one claim term  
27 from this patent: namely, "pilot signal," which appears in claims  
28

1 1, 3, 4, 5, and 6. Claim 1 illustrates how the term is used in  
 2 the patent:

3 Data communications equipment apparatus  
 4 comprising:  
 5 an echo canceler that is trained during an  
 6 echo-canceler training phase of a half  
 7 duplex training sequence with a far-end  
 8 data communications equipment while the  
 9 communication channel is operating in a  
 10 linear mode; and  
 11 a filter that filters a received signal during  
 12 the echo-canceler training phase to remove  
 13 a **pilot signal** transmitted by the far-end  
 14 data communications equipment before  
 15 application of the received signal to the  
 16 echo canceler to train the echo canceler on  
 17 an echo signal component thereof.

18 '657 patent col. 8:8-:21.

19 The parties here dispute whether this "pilot signal"<sup>8</sup> must  
 20 cause "linear operation of the communications channel." Defs.'  
 21 Claim Const. Brief 16. Defendants contend that this limitation is  
 22 required by the specification, which states, "This pilot tone is  
 23 of a high enough signal level to cause the above-mentioned  
 24 compander to achieve its linear range." '657 patent col. 2:7-:9.  
 25 Brandywine argues that the term should be construed as "a signal  
 26 wave transmitted over the system to indicate control or its  
 27 characteristics." The CenturyTel court rejected Defendants'  
 28 proposed construction, finding that Brandywine's proposed

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23 <sup>8</sup> According to the General Service Administration's (GSA) Glossary  
 24 of Telecommunications Terms, a pilot signal is a "signal, usually a  
 25 single frequency, transmitted over a communications system for  
 26 supervisory, control, equalization, continuity, synchronization, or  
 27 reference purposes." GSA, Telecommunications: Glossary of  
 28 Telecommunications Terms (1996), <http://www.its.bldrdoc.gov/fs-1037/fs-1037c.htm> (last visited April 14, 2014, 4:00 p.m.). Federal courts  
 routinely use the GSA Glossary to aid in their construction of patents  
 issued in the telecommunications field. See, e.g., Northpoint Tech.,  
Ltd. v. MDS Am., Inc., 413 F.3d 1301, 1316 (Fed. Cir. 2005) (citing  
 glossary for claim construction purposes).

1 construction was closer to the term's plain and ordinary meaning.  
2 See CenturyTel Order 19-21.

3       This Court likewise rejects Defendants' proposed  
4 construction. The "pilot tone" description that Defendants cite  
5 for support applies only to an embodiment of the invention which  
6 is designed specifically to address situations where the compander  
7 is "not linear in the signal range of the returned far-end echo  
8 signal during the half-duplex training phase." Id. col. 4:3-:4.  
9 While the pilot signal might cause "linear operation of the  
10 communication channel" in this embodiment, the claims do not  
11 require that it does so in every embodiment of the invention.  
12 Accordingly, Defendants' proposed construction is too narrow and  
13 must be rejected.

14       The Court therefore adopts the following construction of  
15 "pilot signal," which is a modified version of Brandywine's  
16 proposed construction: "a signal transmitted over the system for  
17 control or reference purposes."

18       E. '501 Patent

19       When multiple communications providers share a common  
20 communication channel -- for instance, when two telephone  
21 companies share a single telephone wire -- those providers  
22 typically use different ranges of the frequency spectrum to avoid  
23 interfering with each other's transmissions. '501 patent col.  
24 1:23-:41. The process by which such providers select and use  
25 different frequency ranges is known as "spectrum management." The  
26 '501 patent relates generally to "spectrum management" technology.  
27 Id.  
28

1 The parties dispute four of the '501 patent's claim terms.  
 2 Three of these disputed terms appear in claim 1 of the patent,  
 3 which reads as follows:

4 An apparatus comprising:  
 5 a modem connected to a subscriber loop, the  
 6 modem being capable of operating in one or  
 7 more modes that are compatible with one or  
 8 more **spectrum management classes** defined by  
 9 a standard, each spectrum management class  
 10 defining power spectral density (PSD)  
 11 requirements, the modem being configured to  
 12 automatically select a mode that is  
 13 compatible with at least one of the  
 14 **spectrum management classes**;  
 15 a **plurality of transceivers**, each transceiver  
 16 corresponding to one of the modes, wherein  
 17 the modem electrically couples a  
 18 corresponding transceiver to the subscriber  
 19 loop upon selecting one of the modes;  
 20 a selector, the selector selecting one of the  
 21 transceivers to be electrically coupled to  
 22 the subscriber loop; and  
 23 an **Automatic Class Measurement device** in  
 24 communication with the selector, the  
 25 Automatic Class Measurement device being  
 26 configured to automatically select a mode  
 27 that is compatible with at least one of the  
 28 **spectrum management classes** and to cause  
 the selector to select one of the  
 transceivers to be electrically coupled to  
 the subscriber loop.

'501 patent col. 11:65-12:18.

20 The fourth disputed claim term appears in claim 12, which is  
 21 quoted and discussed below. Every claim of the '501 patent  
 22 contains one or more disputed terms.

- 23 1. "A Plurality of Transceivers (Each Transceiver  
 24 Corresponding to One of the Modes)" (Claims 1, 5,  
 12)

25 Brandywine contends that the phrase "a plurality of  
 26 transceivers," as it is used in this term, means "two or more  
 27  
 28

1 hardware and/or software transceivers."<sup>9</sup> Defendants argue that  
2 "plurality of transceivers" means "two or more hardware  
3 transceivers." The CenturyTel court adopted Defendants' proposed  
4 construction because it found that a "transceiver" is a piece of  
5 physical hardware. CenturyTel Order 6-7 ("The Court is unwilling  
6 to read additional possibilities into the claim language that  
7 negate the clear language and intent of the claim."). This Court  
8 similarly concludes that a "plurality of transceivers" means "two  
9 or more hardware transceivers."

10 Brandywine contends that the CenturyTel court's reasoning is  
11 flawed because its construction was based on a dictionary  
12 definition of "transceiver," rather than intrinsic evidence in the  
13 patent and the prosecution history. See id. at 7 (citing Harry  
14 Newton, Newton's Telecom Dictionary (11th ed. 1996)). The  
15 CenturyTel court's reliance on the dictionary definition, however,  
16 was entirely proper because it relied on the definition for a  
17 limited purpose -- namely, to determine whether a transceiver  
18 constituted a "physical device" -- and the definition it cited did  
19 not conflict with any intrinsic evidence. Vitronics Corp., 90  
20 F.3d at 1584 n.6 ("Judges are free to consult [extrinsic evidence]  
21 at any time in order to better understand the underlying  
22 technology and may also rely on dictionary definitions when  
23 construing claim terms, so long as the dictionary definition does  
24 not contradict any definition found in or ascertained by a reading  
25 of the patent documents."). The CenturyTel court also noted that,

26 \_\_\_\_\_  
27 <sup>9</sup> After the claim construction hearing, Brandywine revised its  
28 proposed construction of this term. Its revised proposal must be  
rejected for the same reasons that its original proposal must be  
rejected.

1 at the hearing in that case, "Plaintiff appeared to concede . . .  
 2 that a transceiver is a physical device." CenturyTel Order 7 n.3.

3 Accordingly, the Court adopts Defendants' proposed  
 4 construction of the disputed term: "two or more hardware  
 5 transceivers available for connection, one at a time, to the  
 6 subscriber line."<sup>10</sup>

7 2. "Automatic Class Measurement Device" (Claims 1, 5,  
 8 12)

9 This term refers to a device that is part of a larger  
 10 apparatus claimed by the '501 patent. The parties dispute the  
 11 scope of the device's capabilities. Brandywine asserts that the  
 12 device is "capable of performing tests to determine which  
 13 transceiver should be connected to a subscriber line." Pl.'s  
 14 Claim Constr. Brief 23. Defendants contend that the device is  
 15 merely capable of "identifying allowable spectrum management  
 16 classes based on line tests." Defs.' Claim Constr. Brief 6. The  
 17 CenturyTel court did not discuss this term in its claim  
 18 construction order.

19 The plain language of the disputed claims illustrates that  
 20 Brandywine's proposed construction is overbroad. Claims 1, 5, and  
 21 12 all expressly state that the "Automatic Class Measurement  
 22 device" is "configured to automatically select a mode that is  
 23 compatible with at least one of the spectrum management classes."  
 24 '501 patent col. 12:16-:17, 12:55-:58, 14:16-:19 (emphasis added).  
 25 In light of this language, Brandywine's proposed construction,

26  
 27  
 28 <sup>10</sup> Both parties agreed to the second part of this construction,  
 beginning with the word "available."

1 which omits any reference to "spectrum management classes," must  
2 be rejected.

3 Similarly, Defendants' proposal to add the limitation, "based  
4 on line tests," to this term must also be rejected. Neither the  
5 patent claims nor the specification requires that the "Automatic  
6 Class Measurement device" rely exclusively on "line tests" to  
7 identify spectrum management classes or select an appropriate  
8 mode.

9 The Court therefore adopts the following construction of this  
10 term: "a device capable of identifying allowable spectrum  
11 management classes to determine which transceiver should be  
12 connected to a subscriber line."

13 3. "Spectrum Management Classes (Defined by a  
14 Standard)" (Claims 1-13)

15 The parties dispute whether or not the term "spectrum  
16 management classes" is indefinite. Defendants contend that the  
17 term is indefinite because, when the '501 patent was issued, the  
18 Federal Communications Commission (FCC) had not yet finalized its  
19 "deployment rules for identifying the available Spectrum  
20 Management Class or Classes." '501 patent col. 6:31-:32.  
21 Further, the patent itself acknowledges that these rules "even  
22 once finalized, are always subject to change." Id. col. 6:32-:33.  
23 Thus, Defendants argue, because these spectrum management rules  
24 lacked a stable and unchanging definition at the time the patent  
25 was issued, the claims that refer to "spectrum management classes"  
26 must be found indefinite. The CenturyTel court rejected this  
27 argument and found that this term was not indefinite. CenturyTel  
28 Order 4-6.

1 The Federal Circuit has held that claims should only be  
2 deemed indefinite if they are "insolubly ambiguous, and no  
3 narrowing construction can properly be adopted." Exxon Research &  
4 Engineering Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir.  
5 2001). At the same time, "courts may not redraft claims, whether  
6 to make them operable or to sustain their validity." Chef Am.,  
7 Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1374 (Fed. Cir. 2004).

8 Here, the claims that use the term "spectrum management  
9 classes" are not indefinite. The specification expressly outlines  
10 the purpose of these spectrum management classes, noting that they  
11 would be defined by a set of standards designed to "minimiz[e] the  
12 potential for cross-talk interference in twisted pair subscriber  
13 loop cables that are shared by multiple service providers." '501  
14 patent col. 1:31-:34. The specification further explains that  
15 these standards would be based on criteria such as "(1) transmit  
16 signal power spectral density (PSD) requirements, (2) transmit  
17 signal average power requirements, (3) transverse balance  
18 requirements, (4) deployment restrictions based upon the  
19 subscriber loop characteristics, and (5) loop assignment  
20 guidelines." Id. col. 1:42-:47. This discussion of "spectrum  
21 management classes" is sufficient to illustrate the term's meaning  
22 to a person of ordinary skill in the art.

23 While Defendants note that the FCC's specific spectrum  
24 management standards are subject to change, this variability in  
25 the official standards does not render the patent claims  
26 indefinite. By way of analogy, the claims of a radar-gun patent  
27 would not be considered indefinite merely because they refer to  
28 state speed limits that are subject to change. As noted above,



1 the '501 patent identifies a clear set of measurable criteria on  
2 which the "spectrum management classes" are based and the claimed  
3 invention purports to have the capacity to distinguish among those  
4 classes. Thus, as long as the "spectrum management classes" are  
5 based on the same criteria identified in the patent, the claims  
6 referring to "spectrum management classes" are sufficiently  
7 definite.

8 Defendants' efforts to analogize this case to Datamize, LLC  
9 v. Plumtree Software, Inc., 417 F.3d 1342 (Fed. Cir. 2005), are  
10 not persuasive. In Datamize, the Federal Circuit held that the  
11 term "aesthetically pleasing" was indefinite because aesthetic  
12 value is not measurable. Id. at 1347. Here, in contrast, the  
13 '501 patent identifies a specific set of measurable criteria,  
14 outlined above, incorporated into the term "spectrum management  
15 classes."

16 Accordingly, the Court rejects Defendants' argument that  
17 "spectrum management classes" is indefinite and adopts the  
18 following construction of this term, which Brandywine proposed in  
19 the parties' post-hearing brief: "requirements for data  
20 transmission equipment designed to minimize interference with  
21 other nearby data transmitters."

22 4. "The Modem Electrically Couples" (Claim 12)

23 The parties dispute whether this term renders claim 12 of the  
24 patent indefinite. Claim 12 reads, in relevant part, as follows:

25 A system for communicating over a subscriber  
26 loop, the system comprising:  
27 a first modem located at a subscriber premise,  
28 the first modem being capable of operating  
in one or more modes that are compatible  
with one or more spectrum management  
classes defined by a standard, each

spectrum management class defining power spectral density (PSD) requirements;  
 a second modem located at a central office, the second modem being capable of operating in one or more modes that are compatible with one or more of the spectrum management classes;  
 a subscriber loop electrically coupling the first modem to the second modem wherein the first and second modems cooperate with each other to determine which of the spectrum management classes are compatible with the subscriber loop;  
 a plurality of transceivers, each transceiver corresponding to one of the compatible modes, wherein **the modem electrically couples** a corresponding transceiver to the subscriber loop upon selecting one of the modes; . . . .

'501 patent col. 13:25-14:14. Defendants contend that this claim is indefinite because it fails to identify whether the term "the modem electrically couples" refers to the first or second modem mentioned in this claim. The CenturyTel court agreed and concluded that "the meaning of this term is not ascertainable by one of ordinary skill in the art and is thus indefinite." CenturyTel Order 9.

As noted above, claims should only be deemed indefinite if they are "insolubly ambiguous." Exxon Research & Engineering Co., 265 F.3d at 1375. Brandywine contends that the disputed claim is not "insolubly ambiguous" because it can simply be construed to refer to each of the two modems mentioned earlier in the claim. For support, it points to language from the prosecution history suggesting that claim 12 -- which combined three previously asserted claims -- was supposed to contain a preamble that read: "The system of [another claim], wherein each of the first and second modems further comprises . . . ." Sun Decl., Ex. T, March 2004 Claim Amendments, at 8. According to Brandywine, the patent

1 applicant "left off the preamble" in the process of amending these  
2 claims. Pl.'s Claim Constr. Brief 28. Brandywine notes that the  
3 CenturyTel court did not have the benefit of this aspect of the  
4 prosecution history when it issued its claim construction order.

5 Brandywine's analysis of the prosecution history does not  
6 support its proposed construction because it does not explain why  
7 the preamble was omitted and why it should now be read back into  
8 the claim. Brandywine does not assert, for instance, that the  
9 preamble was omitted due to error by the U.S. Patent and Trademark  
10 Office (PTO). See, e.g., Novo Indus., L.P. v. Micro Molds Corp.,  
11 350 F.3d 1348, 1354 (Fed. Cir. 2003) (holding that, in certain  
12 circumstances, a "district court can act to correct an error in a  
13 patent by interpretation of the patent where no certificate of  
14 correction has been issued"). Further, even if Brandywine had  
15 made such an allegation, this Court would only be permitted to  
16 correct the error if it was "evident from the face of the patent."  
17 Group One, Ltd. v. Hallmark Cards, Inc., 407 F.3d 1297, 1303 (Fed.  
18 Cir. 2005). Here, it is not evident from the face of the patent  
19 that claim 12 is missing the omitted preamble that Defendants  
20 cite; claim 12 has a preamble. Because it would be improper to  
21 reincorporate that language into the claim, the Court finds that  
22 claim 12 is indefinite.

23 Although Brandywine asserts that it is premature to rule on  
24 indefiniteness at the claim construction stage, the Federal  
25 Circuit has made clear that indefiniteness is a legal question  
26 that district courts may decide prior to trial. Personalized  
27 Media Commc'ns, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705 (Fed.  
28 Cir. 1998) ("A determination of claim indefiniteness is a legal

conclusion that is drawn from the court's performance of its duty as the construer of patent claims."). Other courts in this district have recognized that "it is appropriate for [district courts] to address indefiniteness issues at the claim construction stage." Eon Corp. IP Holdings LLC v. Aruba Networks Inc., 2014 WL 938511, at \*3 (N.D. Cal.). Brandywine has not identified any factual disputes sufficient to preclude the Court from finding that claim 12 indefinite at this stage.

F. '472 Patent

The '472 patent, like the '501 patent, relates to spectrum management technology. The two patents share nearly identical specifications.

The parties dispute three of the '472 patent's claim terms. All three disputed terms appear in claim 1, which reads as follows:

A method comprising:  
**measuring subscriber loop characteristics;**  
 identifying a first allowable class  
     corresponding to the measured subscriber  
     loop characteristics, where the allowable  
     class is chosen from a group of predefined  
**spectrum management classes;**  
**selecting an operating transceiver from a**  
**group of transceivers within a device,**  
     where each transceiver is configured to  
     communicate in a respective at least one  
     [sic] of the predefined **spectrum management**  
**classes,** and where the selected operating  
     transceiver is configured to communicate in  
     the first allowable class; and  
**enabling the operating transceiver.**

'472 patent col. 11:60-12:5. The disputed terms also appear in claims 6, 8-11, 15, 17-19, and 22.

1. "(Enabling the / Selecting an) Operating Transceiver (from a Group of Transceivers Within a Device)" (Claims 1, 8)

The parties dispute whether the "enabling"/"selecting" steps described by this term must be "automated." Defendants contend that these steps must be automated because the patent's title and abstract both use the words "automatic" and "automatically" to describe generally how the invention operates.<sup>11</sup> The CenturyTel court rejected this argument. See CenturyTel Order 11 ("Upon consideration of the arguments presented, the Court finds that Defendants' proposed construction would require the Court to inappropriately limit the words of the method steps more than necessary.").

This Court, too, rejects Defendants' proposed construction of these terms. The use of the words "automatic" and "automatically" in the title and abstract is not sufficient to justify the "automated" limitation that Defendants propose. These sections of the patent describe the invention in general terms without reference to the individual steps disclosed in the disputed claims.

The language of claims 8 and 13 further suggests that Defendants' suggested limitation is improper. Claim 8 discloses a "computer-readable medium containing a program designed to perform the steps of: . . . selecting an operating transceiver from the group of transceivers . . .; and enabling the operating transceiver." '472 patent col. 12:28-:43. Claim 13, which is

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<sup>11</sup> See '472 patent, Title ("Method and apparatus for automatic selection and operation of a subscriber line spectrum class technology" (emphasis added)), Abstract ("The modem automatically selects a mode of operation that is compliant with one or more of the Spectrum Management Classes." (emphasis added)).

1 dependent on claim 8,<sup>12</sup> discloses a process wherein the same  
 2 "program" is "further designed to perform the step of  
 3 automatically selecting, based on the measured characteristics,  
 4 one of the transceivers that is compatible with at least one of  
 5 the spectrum management classes." Id. col. 12:57-:61. Thus,  
 6 under the doctrine of claim differentiation, it would be improper  
 7 to construe claim 8 (the independent claim) as limited by the word  
 8 "automatically," which appears in claim 13 (the dependent claim).<sup>13</sup>

9 The Court therefore construes these terms according to their  
 10 plain and ordinary meaning, without Defendants' proposed addition.  
 11 It construes "enabling the operating transceiver" as "enabling the  
 12 operating hardware transceiver." Similarly, it construes  
 13 "selecting an operating transceiver from a group of transceivers  
 14 within a device" as "selecting an operating hardware transceiver  
 15 from a group of transceivers within a device."<sup>14</sup>

16 2. "Measuring Subscriber Loop Characteristics" (Claims  
 17 1, 6)

18 The parties dispute whether this term requires that the  
 19 "measuring" step in claims 1 and 6 be performed by "analyzing a  
 20  
 21

---

22 <sup>12</sup> Technically, claim 13 is dependent on claim 12, which is in turn  
 23 dependent on claim 8. This distinction is irrelevant since all of these  
 24 claims refer to the same computer "program."

25 <sup>13</sup> Defendants argue that, if these steps are not performed in an  
 26 "automated" manner, these claims would be invalid because they would not  
 27 be directed to patentable subject matter under 35 U.S.C. § 101. Because  
 28 the parties only addressed this issue cursorily in their claim  
 construction briefs, the Court reserves judgment on this question until  
 the parties have briefed the issue more fully.

<sup>14</sup> Brandywine's proposed constructions for these terms referred to  
 "software" transceivers. The Court has therefore added the word  
 "hardware" to these constructions to make clear that, as previously  
 explained, the word "transceiver" refers to a piece of physical hardware  
 in this context.

1 test signal." Defendants argue that this limitation is required  
2 by an excerpt from the specification that states:

3           Measurement of loop reach may be accomplished  
4           by transmitting from one end of the loop, such  
5           as from the CO 2, a signal with a known  
6           spectral content and measuring at the other  
7           end, such as at the DEC, the level at various  
8           frequencies across the frequency band of  
9           interest.

10 '472 patent col. 7:52-:63. Brandywine argues that the term should  
11 be construed as "determining subscriber loop characteristics."  
12 The CenturyTel court adopted Brandywine's proposed construction.  
13 CenturyTel Order 9-10.

14           This Court finds that each party's proposed construction is  
15 inadequate here. Defendants' proposed construction is not tenable  
16 because the excerpt they cite for support is permissive rather  
17 than mandatory and, as such, does not justify the limitation they  
18 have proposed. See '472 patent col. 7:52-:63 ("Measurement of  
19 loop reach may be accomplished . . . ." (emphasis added)).  
20 Because they fail to identify any other language from the patent  
21 to support this limitation, their proposed construction must be  
22 rejected.

23           Brandywine's proposed construction -- which replaces  
24 "measuring" with "determining" -- must also be rejected. Although  
25 Brandywine asserts that "measuring" and "determining" mean the  
26 same thing, it has not adequately justified the need for this  
27 substitution. The word "measuring" is not complex or technical  
28 and the fact that the patent claims use "determining" and  
"measuring" in different contexts suggests that the inventor may  
have understood the two words to have different meanings in the  
context of the patent.

Thus, because this term uses straightforward language, the Court finds that "measuring subscriber loop characteristics" should be construed according to its plain and ordinary meaning. Neither party has presented compelling reasons for adopting a different construction for this term.

3. "(Predefined) Spectrum Management Classes" (Claims 1, 8-11, 15, 17-19, 22)

The parties' dispute regarding this term mirrors their dispute regarding the same term from the '501 patent. For the reasons outlined above, see supra Section I.E.3, the Court will adopt the same construction for this term that it adopted for the term "spectrum management classes" in the '501 patent: "requirements for data transmission equipment designed to minimize interference with other nearby data transmitters."

II. Brandywine's Amended Infringement Contentions

A. Legal Standard

A party may amend its infringement contentions upon a showing of good cause and by order of the Court. Patent L.R. 3-6. Examples of good cause include

(a) a claim construction by the Court different from that proposed by the party seeking amendment; (b) recent discovery of material, prior art despite earlier diligent search; and (c) recent discovery of nonpublic information about the Accused Instrumentality which was not discovered, despite diligent efforts, before the service of the Infringement Contentions.

Patent L.R. 3-6. Patent Local Rule 3-6 "serves to balance the parties' rights to develop new information in discovery along with the need for certainty in legal theories at the start of the case." Apple, Inc. v. Samsung Elecs. Co., Ltd., 2012 WL 5632618,



1 at \*2 (N.D. Cal.) (citing O2 Micro Int'l, Ltd. v. Monolithic Power  
2 Sys., Inc., 467 F.3d 1355, 1366 (Fed. Cir. 2006)).

3 The good cause inquiry considers first whether "the party  
4 seeking leave to amend acted with diligence in promptly moving to  
5 amend when new evidence [was] released." O2 Micro, 467 F.3d at  
6 1363. "In considering the party's diligence, the critical  
7 question is whether the party 'could have discovered [the new  
8 information] earlier had it acted with the requisite diligence.'" Apple,  
9 2012 WL 5632618, at \*6 (citing Google, Inc. v. Netlist,  
10 2010 WL 1838693, at \*2 (N.D. Cal.)). The burden is on the moving  
11 party to show diligence. Id. If the court finds that the moving  
12 party was not diligent in amending its infringement contentions,  
13 it does not need to consider the question of prejudice to the non-  
14 moving party. See O2 Micro, 467 F.3d at 1368 (affirming the  
15 district court's decision refusing leave to amend upon finding the  
16 moving party was not diligent, without considering the question of  
17 prejudice to the non-moving party). However, even if the movant  
18 was arguably not diligent, the court retains discretion to grant  
19 leave to amend. Apple, 2012 WL 5632618, at \*6 (granting leave to  
20 amend infringement contentions, even though court found plaintiff  
21 failed to establish diligence, because of lack of prejudice to  
22 defendant).

23 B. Analysis

24 Brandywine originally filed its infringement contentions in  
25 October 2012 and served its supplemental infringement contentions  
26 on Defendants in January 2014, just over a week before the close  
27 of fact discovery. Its supplemental infringement contentions  
28 flesh out a handful of theories set forth in its original

1 infringement contentions and add a new theory based on induced  
2 infringement. Although Brandywine initially failed to move for  
3 leave to amend its infringement contentions, it eventually filed a  
4 motion for leave to amend in February 2014, soon after Defendants  
5 filed their motion to strike the supplemental infringement  
6 contentions.

7 Brandywine contends that it served its supplemental  
8 infringement contentions on Defendants at the earliest possible  
9 opportunity and that its failure to move promptly for leave to  
10 amend was inadvertent. According to Brandywine, its supplemental  
11 infringement contentions are based on information that it  
12 discovered less than two weeks before it served its supplemental  
13 contentions on Defendants. Specifically, it asserts, its amended  
14 infringement theories were based on information that it obtained  
15 from third-party depositions and 38,000 pages of documents that  
16 Defendants produced in January 2014.

17 Because Brandywine's supplemental infringement contentions  
18 appear to be based at least in part on newly discovered  
19 information, the Court finds that it acted diligently in serving  
20 its amended infringement contentions in January 2014 and seeking  
21 leave to amend shortly thereafter. Although Defendants contend  
22 that Brandywine could have obtained this information sooner had it  
23 acted with greater diligence during discovery, the record does not  
24 support this argument. Brandywine served its third-party  
25 subpoenas at a relatively early stage of discovery but was  
26 ultimately delayed in taking depositions of the relevant third  
27 parties because this action was stayed only a few days after those  
28 subpoenas were issued.

1 In any event, even if Brandywine was arguably not diligent in  
2 seeking to amend its infringement contentions, the Court may still  
3 grant it leave to amend because Defendants have not suffered undue  
4 prejudice here. Apple, 2012 WL 5632618, at \*5. As noted above,  
5 Brandywine's supplemental contentions essentially expand on its  
6 previous infringement contentions and do not add any new patent  
7 claims or products. The only new infringement theory that  
8 Brandywine asserted -- the theory that Defendants induced  
9 infringement by competitive local exchange carriers -- was  
10 subsequently abandoned because it was not raised or discussed in  
11 Brandywine's expert report. Thus, Brandywine's proposed  
12 amendments to its infringement contentions were limited in scope.  
13 Furthermore, Brandywine proposed these amendments at a relatively  
14 early stage in the case, well before Defendants' expert reports  
15 were due and eight months before trial was set to begin. To the  
16 extent that Defendants needed additional time to take discovery or  
17 otherwise respond to Brandywine's proposed changes, they could  
18 have sought a stipulation to amend the case management schedule,  
19 as they had previously done when they required additional time for  
20 discovery. See Docket No. 97, Stipulation to Amend Case Schedule.  
21 They did not do so and have not shown that they suffered prejudice  
22 as a result of their inability to take additional discovery.  
23 Accordingly, Brandywine is granted leave to file its supplemental  
24 infringement contentions. See Linex Technologies, Inc. v.  
25 Hewlett-Packard Co., 2013 WL 5955548, at \*2 (N.D. Cal.) (granting  
26 motion for leave to amend infringement contentions where the  
27 plaintiff's "proposed amendments to its infringement contentions  
28 do not add new patent claims or new products" and the defendants

1 had "sufficient time to review [the] amended infringement  
2 contentions").

3 CONCLUSION

4 For the reasons set forth above, the Court construes the  
5 disputed claim language in the manner explained; GRANTS  
6 Brandywine's motion for leave to amend its infringement  
7 contentions (Docket No. 149); and DENIES Defendants' motion to  
8 strike Brandywine's supplemental infringement contentions (Docket  
9 No. 128).

10 The Court will hear all dispositive motions and Daubert  
11 motions on June 5, 2014 at 2:00 p.m.

12 IT IS SO ORDERED.

13  
14 Dated: 4/18/2014

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CLAUDIA WILKEN  
United States District Judge